



# The Essentials of Fire Fighting

## Personal Protective Equipment

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# Student Performance Objective

**The student shall properly don and wear their MCFRS or Corporation issued personal protective equipment, given various operational scenarios, to a practical test accuracy of 100%.**

# Overview

- Introduction
- Need for PPE
- PPE Selection
- PPE Construction Concepts
- PPE Components
- Use of PPE
- Care & Maintenance

# Introduction

- Fire suppression activities normally occur in hostile environments that have a great potential for injury.
- Even though fire fighter deaths and fires have decreased over the last ten years, fire fighter injuries have remained relatively unchanged. What does this mean?

# Need for PPE

- The environment
- Changes in fire load
- Toxicity of materials

# PPE Selection

- Occupational Safety & Health Administration (OSHA)
- National Fire Protection Association (NFPA)

MCFRS personal protective equipment is purchased and issued in compliance with current OSHA regulations and NFPA 1971 standards.

# PPE Construction Concepts

- Provide thermal insulation through layering of materials.
- Provide flame-resistance through the use of synthetic fabrics.
- Provide impact and abrasion-resistance through the use of synthetic materials.

# Three Protective Layers of PPE

- Outer Shell
- Moisture barrier
- Thermal barrier



# PPE Materials

- PBI®
- Kevlar®
- Gortex®
- CrossTech®
- Nomex®

- Scotchlite®
- Fiberglass
- Polycarbonate
- Velcro®
- Leather

# PPE Components

- Helmet
- Protective hood
- Protective coat
- Protective trousers
- Firefighting Gloves
- Extrication Gloves
- Firefighting boots

- Eye Protection
- Hearing protection
- SCBA
- PASS
- PAT
- Handlight

# Use of PPE

- Proper fit
- Proper donning
- Proper adjustment

**When responding to a fire, wear all of your gear  
ALL OF THE TIME!!!**

# Firefighting Boots

Field-Issued  
Leather Boot



Recruit-Issued  
Rubber Boot

# Donning Protective Pants



# Donning Protective Pants





# Proper Fit of Protective Pants



**Too Long**



**Just Right!!**



**Too Short**

# Donning Protective Hood



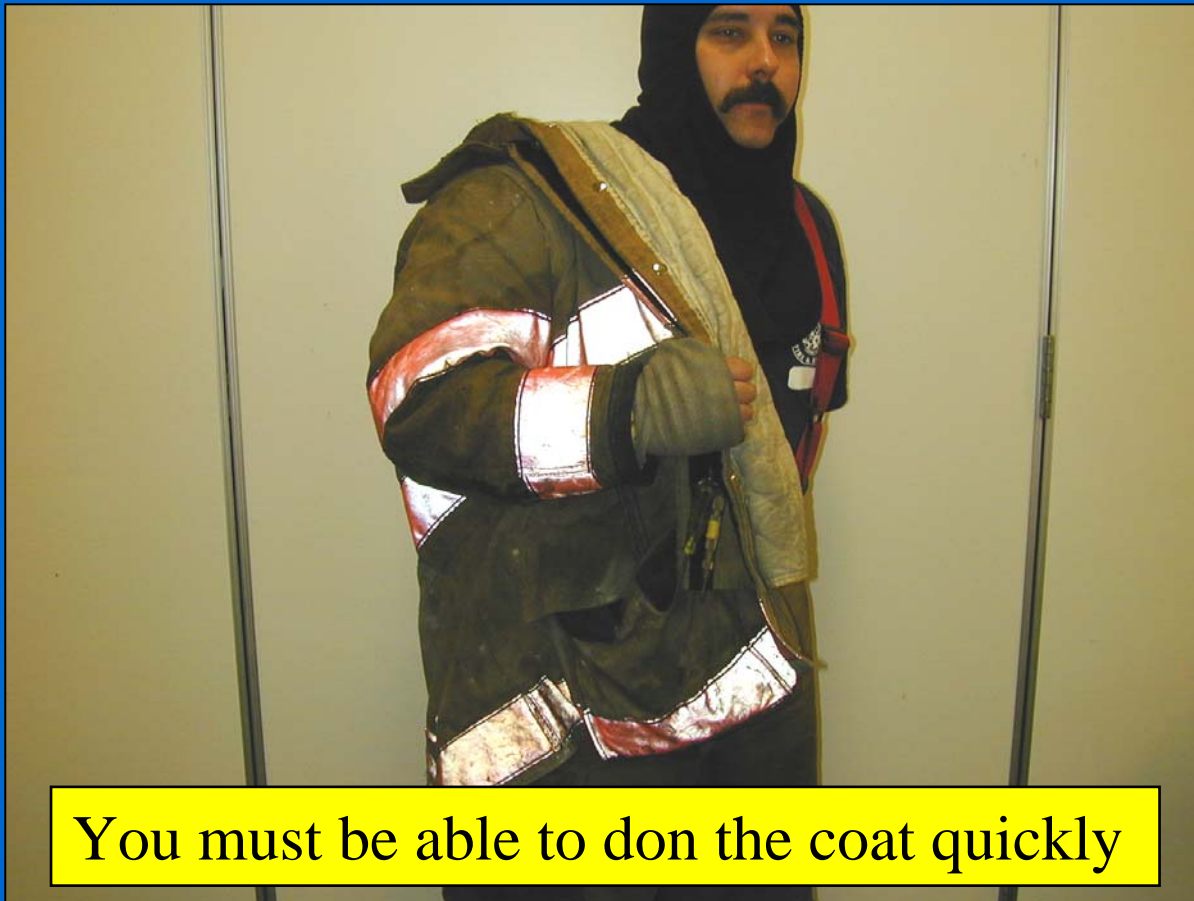
Your hood should be snug going over your face



# Donning Protective Hood



# Donning Protective Coat



**You must be able to don the coat quickly**

# Closing Protective Coat



**Use all of the fasteners !!!**

# Donning Protective Coat





# Donning the Helmet



- Ratchet adjusted
- Ear flaps down
- Chin strap in-place



# Donning the Gloves



# Donning the Gloves

**A good fit insures wrist protection.**



# Eye Protection

- Must meet ANSI specifications
- Clean and free of scratches
- Use eye protection when appropriate
- Carry your eye protection at all times
- Eye protection comes in many forms safety glasses , safety goggles & helmet faceshields
- Helmet face shields are secondary eye protection only!!



# Types of Eye Protection

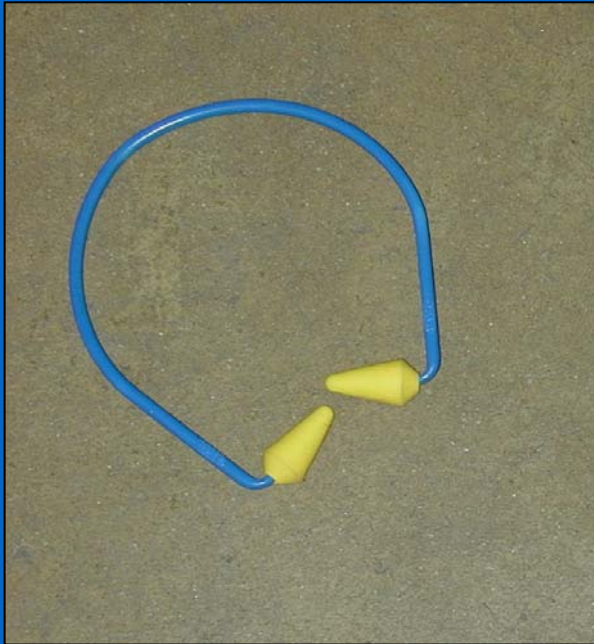


**Standard Issue**

# Hearing Protection

- Mandated by OSHA (29 CFR 1910.95)
- All apparatus in Montgomery County must have some sort of hearing protection

# Types of Hearing Protection



Standard Issue

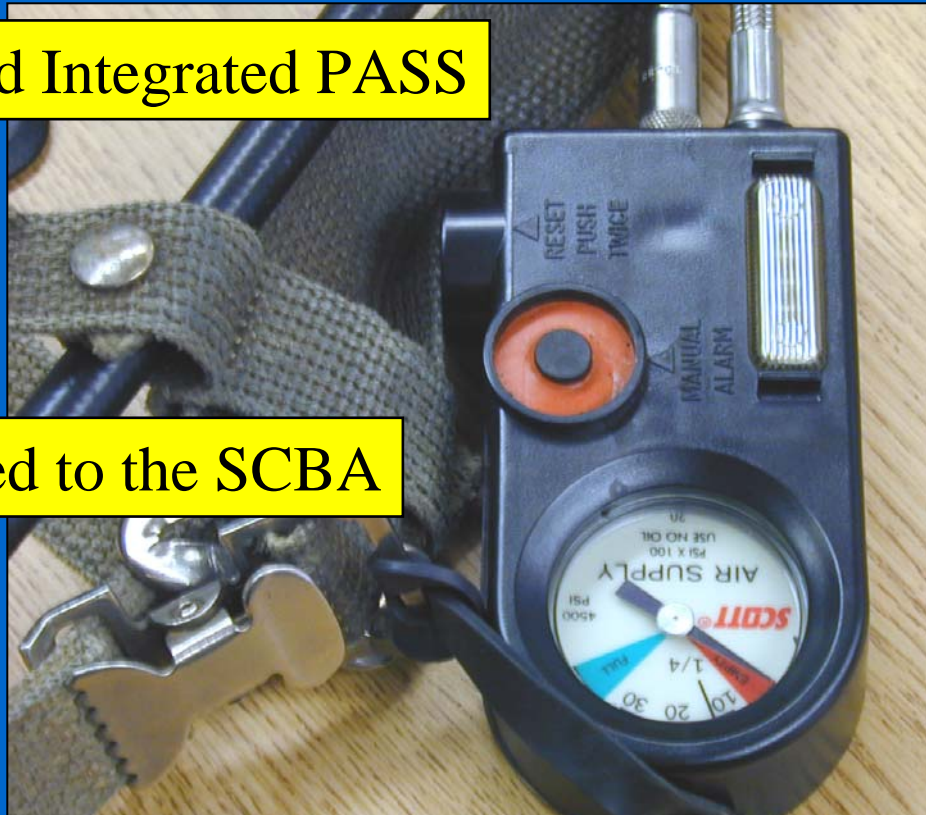


Found on Vehicle

# Integrated PASS Device

Battery-Operated Integrated PASS

Permanently Affixed to the SCBA



Automatically turns on when the cylinder is turned on.

# Integrated PASS Device

- It is permanently affixed to the SCBA.
- It must be checked every day
- It must be maintained in working order.

# Personnel Accountability Tag



Your PAT is a critical part of your safety envelope; it allows for rapid identification of personnel should a fireground emergency occur.



# Hand Light



Two styles of hand lights commonly found on MCFRS apparatus.

# Hair Grooming Policy

Why do we have a hair grooming policy?





# Hair Grooming Policy



**TO PROTECT YOU!!!**

# Hair Grooming Policy



# PPE Care & Maintenance

- Follow manufacturer's recommendations.
- MCFRS Protective Clothing Policy
- Storage
  - Dry area
  - No sunlight
- Quarterly Gear Inspection

# PPE Cleaning Tag

One tag is completed and attached to each garment being sent out for cleaning

# MCFRS Station Uniform

- Your uniform is NOT flame resistant
- Do not expose your uniform to open flame or sparks
- Your uniform provides NO thermal protection

# Review

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- Need for PPE
- PPE Selection
- PPE Construction Concepts
- PPE Components
- Use of PPE
- Care & Maintenance



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